

REMARKS

Claims 10-18 were examined in the Office Action. Claims 26-31 have been added.

Reconsideration of the present application in view of the following comments is hereby requested.

Claims 10-18 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,561,318 to Gnade. The applicant respectfully traverses. To establish a *prima facie* case of anticipation, each and every element and limitation of the subject claim must be disclosed in a single reference. Several features of the sole independent claim (claim 10), are not disclosed by the Gnade reference. As revealed in the cited passage in the Office Action, Gnade's numerals 28 and 29 refer to materials deposited separate from one another to which different gelling/aging conditions are applied to result in different porosities. In contrast, the undisclosed features of claim 10 include a layer of porous material comprising a first portion and a second portion of different densities, among other things. The two-layer structure of Gnade does not disclose this claim 10 layer.

In another example, claim 10 recites that the first portion has a "baseline density" of the porous material while the second portion has a density that is greater relative to this baseline. The cited passage of the Gnade reference reveals no baseline density for either layer 28 or 29 as such term is commonly understood by those skilled in the art. To the contrary, the cited passage touts the flexibility of independently varying porosity of either layer through gelling/aging control.

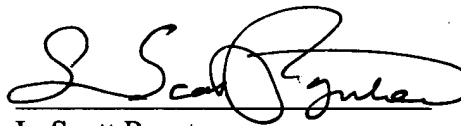
In addition to the patentability of the base claim, further reasons support the patentability of rejected dependent claims. For example, there is no disclosure that the asserted materials of

the Gnade reference are a nanoglass material as recited in claim 12. Consequently, there are numerous grounds supporting withdrawal of the rejection.

Claims 26-31 have been added to further define the inventions of the present application and are likewise believed to be patentable over the references of record. Among the features of independent claim 26 are inclusion of a wafer with a porous layer comprised of a nanoporous material deposited on a substrate in which a high density portion of the layer is a densified form of a low density portion of the layer. Claim 27 depends from claim 26 further defining the invention thereof. Independent claim 28 is directed to an apparatus including features such as a deposition chamber, a wafer in the chamber that has a layer of nanoporous material, and a plasma generator. Claims 29-30 depend from claim 28, further defining the invention thereof. Claim 31 depends from claim 10, further defining the invention thereof.

In view of the forgoing, it is believed claims 10-18 and 26-31 are in condition for allowance. Reconsideration of the present application is respectfully requested.

Respectfully submitted:

A handwritten signature in black ink, appearing to read "L. Scott Paynter", is written over a horizontal line.

L. Scott Paynter
Reg. No. 39,797
Woodard, Emhardt, Naughton,
Moriarty & McNett
Bank One Center Tower
111 Monument Circle, Suite 3700
Indianapolis, Indiana 46204-5137